

angles, which are nearly right angles; the upper surface is but little convex, the reflected lateral margins are rather broad, the dorsal channel moderately distinct, but obliterated near the anterior and posterior margins of the thorax; on each side, behind, are two oblique, long, smooth foveæ, between which is a transverse impression situated at about one-fourth of the distance from the base towards the apex of the thorax—this transverse impression is not strongly marked. Elytra elongate-ovate, above subdepressed, the lateral reflected margins broad and distinct, the surface nearly smooth but exhibiting indistinct striæ, and these are most faintly punctured; two smallish red spots are observable on each elytron near the outer margin, one towards the base of the elytron, and the other on the apical fourth; the legs are pitchy or pitchy-red. Sometimes the red spots on the elytra are obliterated, the legs are nearly black, and the antennæ and palpi are pitchy.

Obs.—As regards one of the characters upon which I found the present genus, I allude to the male sex having *four* of the joints of the anterior tarsi distinctly dilated, I may call attention to the remark by Dejean in his observations on the *Feronia*, viz. that this group is distinguished from the *Harpali* by the structure of the intermediate tarsi (*i. e.* they are not dilated), and by the fourth joint of the anterior tarsus, which is *never dilated in the male sex*. The genus *Lissopterus* therefore affords a remarkable exception to a general rule.

XLIV.—*The Birds of Ireland* By WM. THOMPSON, Esq.,
Pres. Nat. Hist. Society, Belfast.

[Continued from vol. x. p. 179.]

THE RING-DOVE*—*Columba Palumbus*, Linn.—is common throughout the wooded districts of the island.

Mr. Waterton is rather disposed to believe that in his part of Yorkshire there is an annual increase by migration to the numbers of native birds. Mr. Selby states, in general terms, that there is not any such increase. The great numbers that congregate in autumn, and remain together during winter in Ireland, I have always considered as our indigenous birds only, collected together in their choicest haunts, however widely separated they may have been in the breeding-season.

Belvoir Park near Belfast, with its fine and extensive woods, is quite a preserve for these birds, and throughout the autumn and winter they may be daily seen there in the afternoon, in multitudes.

* Commonly called Wood Quest and Wood Pigeon in the north of Ireland.

nous numbers, occasionally not less than five hundred appearing in one flock. Mr. Selby remarks that the ring-dove prefers fir and ash-trees to roost in, but in this park, the beech apparently is preferred above all other species. Not only is a wood consisting of these trees their chief resort, but in mixed plantations their tops may be seen dotted with these birds, when none appear on other equally lofty deciduous trees, pines, or firs. It was a very pleasing sight on one occasion here to see a number of these birds descend from the highest trees to drink at the river Lagan—which bounds the demesne at one side—before retiring to roost. On November 30, 1838, which was a very dark day, several hundreds were settled on the trees apparently for the night, so early as half-past two o'clock in the afternoon. The immense flocks here, rising *en masse* from their roosting-places with thundering noise, remind us of the vast flights of the passenger pigeon in North America, of which we are so fully informed in the graphic narrations of Wilson and Audubon.

The earliest date in my journal, with reference to large flocks roosting in Belvoir Park, is Sept. 16, 1840, and in the spring of the preceding year, they are noted as seen in very large flocks so late as the 25th of March.

But they breed here fully as early as in the north of England, occasionally even earlier than the latter end of February—the time mentioned by Mr. Selby; lofty trees are generally selected for the nest, but in a locality where the species was protected I have in more than one instance known the nest to be placed not more than seven feet from the ground, in young fir-trees. Their cooing, with which the woods resound in the early spring, and their singular flight at this season, rising and falling suddenly in the air, render the ring-dove highly attractive. Although this bird will, where protected, display little fear of man, particularly in the breeding-season, it is generally very wary, and when assembled in flocks, extremely so: its sense of hearing must be remarkably acute, as the slightest noise, even at a distance, will alarm a flock, and cause the temporary desertion of its intended roosting-place.

The large flocks alluded to divide into foraging parties in the morning, though some few may be seen about their roosting-places at all times of the day. In severe frosts they are driven to the turnip-fields, to feed upon the green tops of the plant. I have seen large flocks regaling on beech-mast; and they are partial to ploughed fields, on account of the seeds and other vegetable matter turned up. Useful in consuming the seeds and roots of weeds injurious to the crops, yet Mr. Waterton, who looks upon all the feathered race in the most favourable light that truth will warrant, does not consider the ring-dove of any service to man. A friend, whose country-seat is in the valley of the Lagan, and near to Belvoir Park, where the species is so numerous, reports, that he has often seen ring-doves pluck gooseberries and currants from the bushes in his garden, but never knew them to attack his cherries. They are very destructive to young plants of the cabbage tribe, which are preferred to the tender tops of turnips. Quantities of all kinds of his grain, when ripe, are stated to be de-

stroyed by these birds, which are accused of flying against the standing stalks, and prostrating them, to feed upon the pickles, and alighting with the same evil intent on the masses prostrated by storm or rain, as well as on the "stooks." Wheat is their favourite—and it is said that for it "they will fly a mile farther" than for any other grain.

Though the ring-dove is prized in the north of Ireland, the young are not regularly sought after for the table, as they are stated by Mr. Waterton to be in Yorkshire. This gentleman in his 'Essays on Natural History,' and Mr. Macgillivray in his 'British Birds,' give full and interesting accounts of the species. In France and Switzerland I have, in summer and autumn, observed the ring-dove to be equally common as in the British Islands*.

ROCK-DOVE, *Columba Livia*, Brisson †.—About the rock-bound and caverned coasts on all sides of Ireland, and the adjacent islands, this species has occurred to me. It is likewise to be found at inland caves and grottos, such as in limestone districts especially are not unfrequent. Some authors speak of the sea-coast only as frequented by the rock-dove, but from personal observation it can be stated, that caverns, be they inland or marine, are its natural abiding-places; and whether situated in the inland solitude, close by the din of the water-fall, or the "roar of ocean's waves," are equally resorted to.

* The Stock-Dove, *C. Œnas*, is unknown both to Ireland and Scotland. In England it is said to frequent only the midland and eastern counties.

† This bird is the parent of the common tame pigeon. When the dove-cot is not far distant from the nestling-places of the wild birds in the rocks, the tame ones often resort thither and pair with them, and the mottled produce seen frequenting wild localities often puzzle the tyro ornithologist. It may be mentioned, on account of the period of time that elapsed on the occasion, that a tame pigeon taken from Belfast to the Falls, two miles distant, and shut up in a room for twelve months, immediately on being liberated flew back to its old quarters.

The following paragraph on carrier pigeons appeared in the *Leinster Express* newspaper in Dec. 1842:—"One of these pigeons was let loose from Palmerston-house, near Chapelizod, the seat of the Earl of Donoughmore, when it accomplished the journey to Castle Bernard, which is upwards of sixty-two miles, in two hours; yet the flight was much impeded, as the day was both dark and hazy, accompanied with a strong head wind at the time. At the late fair of Ballinasloe, Thomas Bernard, Esq. took with him one of these birds, which he let go in the town at eleven o'clock A.M. with a note appended, directing dinner to be ready at Castle Bernard at the given time, as he purposed being home that day, when the bird took its flight, and the message was delivered in eleven minutes after, having travelled twenty-three miles Irish in that wonderful short space of time, or, in other words, at the rate of $125\frac{1}{2}$ miles an hour. These pigeons, of which Mr. Bernard has a large flock, are so domesticated, that he can handle them as he pleases, and so very tractable are they, that whenever he calls, they attend the call promptly."

An interesting note on the attachment shown by a tame pigeon to her mate, which had been shot and gibbeted in a pea-field, is related by Mr. Jesse, in his 'Gleanings of Natural History,' p. 112, 1st series.

On examining the crop of some of these birds shot in the month of June 1832, at the wild peninsula of the Horn (co. Donegal), where they are very common, they were found to be filled with the seeds of rushes. When visiting the island of Achil, on the 29th of June 1834, in company with Mr. R. Ball, we saw several rock-doves feeding on the low sandy tract near Keil, and approached them within about twenty-five paces. On remarking to Lieut. Reynolds, R.N. of the Coast Guard service, then stationed there, how near they permitted the approach of our party, he stated that on the preceding day he killed twenty-one of them about the same place, and that he had killed as many as fifty and fifty-two in one day there, although more than two were never procured at one shot. In this wild district they are seldom molested, and consequently exhibit little fear of man. In the level tract alluded to there is no ambush to conceal the sportsman, who must walk up directly within sight of the birds until within shooting distance. It is only at a particular season that they are seen here, when, according to my informant, they are attracted to the locality by a "small pea" which is abundant, and is always found in the crops of those killed. We requested to be shown the plant, and found it to be the common bird's-foot trefoil (*Lotus corniculatus*). When walking along the top of the fine marine cliffs about Portpatrick, in Wigtonshire, in Aug. 1838, in company with Capt. Fayrer, R.N., he remarked, on some rock-doves being sprung, that he had shot many of them there as they came to feed on the "wild liquorice," a favourite kind of food—this also I found to be the *Lotus corniculatus*. About the marine cliffs near Ballantrae, in the adjoining county of Ayr, I have remarked these birds to be common, and have seen flocks of them alight in the fields of green or unripe corn, near the coast*.

In August 1826, when visiting the celebrated cascade at Tivoli, near Rome, rock-doves presented a singular and beautiful appearance, as numbers of them kept flying in and out of the gloomy recesses of the rock, close to where the mass of waters was precipitated: viewed from the heights above, they looked so remarkably small, that at first sight I was deceived as to their species.

At the end of April 1841, I observed rock-doves to be numerous about the precipitous and caverned cliffs of the island of Sphacteria, forming part of the western boundary of the noble bay of Navarino. When there on the 29th and 30th of that month, the officers of H.M.S. Beacon set out in a boat for the purpose of entering the caves to shoot them, and returned on each day with several brace. They remarked, that of the great numbers seen, all were on the western or *sea* side of the island, although as fine caverns are on the eastern or *bay* side. Again, when becalmed in the *Ægean* Sea on the 10th of June in H.M.S. Magpie, a likely place for these birds presenting itself in a rocky islet, N.E. of Port Nousa, in the island of Paros, a boat was lowered for the commander and myself to go in pursuit of them. A few were seen about its caves and cliffs, and a young bird of the year which was shot on wing was in full plu-

* Mr. Macgillivray gives a full and excellent account of this species from personal observation in Scotland.

mage, but still retained some fragments of down about the head. On this occasion I could not but think how very different was the scene and climate from that in which I first became initiated in rock-dove shooting, by thus visiting marine caves for the purpose. This was in the snow-white range of caverned cliffs extending for some distance westward of Dunluce Castle, near the Giant's Causeway. The rock-dove was equally common in both localities.

THE TURTLE-DOVE—*Columba Turtur*, Linn.—is an occasional visitant to Ireland, and has been obtained in the counties ranging farthest to the south-west and north-west. It has appeared in spring, summer and autumn, and probably visited the island in some instances to increase its species, although no instance of its breeding here is known to me*. In four or five successive years it has occurred.

Mr. Templeton records the turtle-dove as "seen at Cranmore and Shanes-Castle;" the former his own residence near Belfast, the latter that of Earl O'Neil, situated on the borders of Lough Neagh. About the year 1820, one of these birds was seen by a friend at Fisherwick Lodge; which, with the two localities just named, is in the county of Antrim. The collection of J. V. Stewart, Esq. of Rockhill, Letterkenny, contains a specimen shot in the north-west of the county of Donegal. About Youghal, the species has two or three times been met with by R. Ball, Esq. I have been informed by Dr. Harvey of Cork, that "Mr. Fennell of Ballibrado, near Cahir, county of Tipperary, shot a turtle-dove there in the spring of 1830, when several of them were seen during a few weeks about his place; in the following year, likewise, he saw three or four of these birds in the same locality." In March 1834, a turtle-dove shown me by Mr. Glennon, bird-preserved, Dublin, was said to have been shot at Carton, the seat of the Duke of Leinster; and at the same time it was mentioned that the species had for two or three summers visited Simpson's nursery-grounds, near the metropolis. By the late T. F. Neligan, Esq. of Tralee, one of these birds was obtained near that town on September 20, 1834; its crop was filled with wheat. To T. W. Warren, Esq. of Dublin, I am indebted for notes to the effect, that in the year 1834 he saw a recent example of this species, which was shot in the county of Wexford; that two specimens in his collection were shot near Malahide, county of Dublin, in the summers of 1835 and 1836—two or three years before this time, he more than once met with a bird of this species feeding in a field of vetches, in the locality whence the specimens were procured, but it was too wary to admit of his approach within gun-shot. H. H. Dombbrain, Esq. states, that one was shot in the summer of 1836, in Lord Roden's demesne, Dundalk. On the 10th of July 1837, I saw a

* Since the above was written, I have been credibly informed that a pair of turtle-doves bred in a plantation near Downpatrick in the summer of 1842. They remained to a late period in the locality, one of them having been killed on the 12th of November. Dr. Burkitt of Waterford mentions two specimens obtained near that town—in 1834 and 1836.

turtle-dove in the shop of Mr. Glennon, who assured me that it had been killed about three weeks previously near Donnybrook, a few miles from Dublin. George Selby, Esq. of Alnwick, Northumberland, (brother to the distinguished naturalist, and imbued with similar tastes,) on visiting Belfast in October 1837, informed me that one of these birds, which admitted of a close approach, was seen by him on the road-side between Armagh and Aughnacloy in the first week of that month.

When on a tour in Holland and Switzerland in the summer of 1826, the turtle-dove was met with, and in the former country was very tame. When proceeding in H.M.S. Beacon from Malta to the Morea in the spring of 1841, a few of these birds appeared on the 24th, 25th, 26th, and 27th of April, coming from the south on their way from Africa to Europe. They generally came singly, and not more than two were seen in company*. On the 29th of April I saw one near Navarino; and again on the 6th of May in the island of Syra:—at the end of this month, numbers were observed in the spacious gardens of the old seraglio at Constantinople.

THE PHEASANT—*Phasianus Colchicus*, Linn.—is a species, which, having unquestionably been introduced to Ireland, has only claims to be considered in a supplementary note. The period of its introduction is unknown to me †. Smith would seem to have imagined that it was indigenous to the island, as in his 'History of Cork' it is observed—"They are now [about 1749] indeed very rare, most of our woods being cut down." This splendid bird has for a long time past been common in many parts of the country, where it is carefully preserved and protected. In Down and Antrim the ring-necked variety is not uncommon; and I have seen a few examples (shot in a wild state) of the female in the assumed plumage of the male, but, although his colours were there, they were always dull in hue compared with the gloss and splendour of the adult plumage of the veritable cock—on the dissection of one of these, the eggs were observed to be not larger than clover-seed.

I have often remarked the aversion of the pheasant to take wing when near its home, and have seen it, even when cantered directly up to, or charged on horseback, run across a considerable stretch of field to the preserve, rather than take wing. Attention has been called by some writers to the effect of thunder in prompting the pheasant to crow, and on this subject the following note appears in my journal:—"April 7, 1833. When walking along the banks of the Lagan today between four and five o'clock, there were a few peals of thunder, at the immediate commencement of each of which, the pheasants in Belvoir Park crowed, although their 'most sweet voices!' were not to be heard at any other time." Mr. Waterton does not believe in the capture of pheasants by means of the fumes of sulphur, but though never present at any such poaching office, I

* In Annals, vol. viii. p. 128, are further particulars.

† In the year 1589 it was noticed as common. See note on Quail.

have no doubt from what has been related to me that they are so taken, and that the vile practice is resorted to on the western, as well as the eastern side of the Irish Sea. An observant friend has often remarked that during the absence of the pheasant from its nest the eggs (sometimes thirteen in number) were covered with hay, which he believed to have been always placed there by the bird itself.

Upon looking to notes on the food observed in opening nine pheasants, killed at various times and places during five months—from December to April inclusive—I find that the stones of haws or fruit of the white-thorn were contained in seven of them; in addition to these were grain, small seeds, and peas: one exhibited a few roots of plants and twigs of trees: another was nearly filled with grass: one only contained any insects—all presented numerous fragments of stone. A pheasant which frequented our own garden daily for some time in summer was accused of feeding on black currants; the tops of turnips are sometimes eaten; and a fine cock bird was in the habit of visiting a stable-yard in the vicinity of Belfast very early in the morning for the purpose of feeding there.

The Bishop of Norwich, in his 'Familiar History of Birds,' mentions an ungallant and furious assault of a cock-pheasant upon a young lady when quietly walking on the highway, but who, nevertheless, seized her assailant and carried him home. Though, perhaps, not a rare instance in the case of the barn-door fowl, it may be worth noticing, that a fine cock of this species kept in our own yard, on more than one occasion assaulted an old cook who nowise meddled with him, though she did sometimes lay hold of some of the members of his seraglio. She was once indisposed for a few days after his attack, on which occasion he, according to her own version, had struck her "severely with his spurs between the ribs."

In April 1842 the following paragraph appeared in a Dublin newspaper:—"On Sunday se'nnight, a child named Martha Collins, living at Harold's-cross, was sent by her mother to a livery-stable yard in the neighbourhood, kept by a Mr. Smith. On entering the yard, a cock flew at the child and struck her three or four times in the face and other parts of the head, cutting her with each blow. A woman, also named Collins, resident in the yard, hearing the screams of the little sufferer, ran to her assistance and rescued her. On the Tuesday following, it was considered necessary to have medical aid, and the child was shown to Dr. Monks, who at once pronounced the case fatal. The child expired the next day. An inquest was held on the body, and a verdict according to the above-mentioned circumstance returned."

In the work last mentioned, a mousing hen is alluded to (vol. ii. p. 97. 3rd ed.), which reminds me that in my young days there was a hen of our own stock which took an especial delight in mouse-hunting, and often have I seen her carrying her victims about as if in triumph.

GOLD PHEASANT (*P. pictus*), SILVER PHEASANT (*P. nycthemeris*). As it is interesting to know the age which these birds will

attain in captivity, one or two notes on the subject may here be introduced. A fine male silver pheasant has been known to me to live twenty-one or twenty-two years. Such gold pheasants as I happened to learn the age of did not exceed half that period, though which species can really be termed the longer lived, I am unable to state. Such of the latter as came under my knowledge died almost instantaneously, and when in the highest condition as to flesh and plumage. Some years ago I saw at Glenarm Park a brood partly of the common, and partly of the silver pheasant, which had thriven very well together under the maternity of a "barn-door" hen—the young of both species made their first appearance on the same day.

It may here be mentioned that a pair of PEA-FOWL (*Pavo cristatus*) which we had for some time, paid due respect to the hall-door, as there they would eat only of bread or biscuit (moistened), although at the back door, or in the yard, they would feed freely on potatoes.

George Matthews, Esq. informs me that many years ago at Springvale, county of Down, where nearly fifty GUINEA-FOWL (*Numida Meleagris*) were kept, they flew about in company every evening before roosting, and then settled for the night on the highest trees about the place, which were ash. On a field of barley being reaped there, a nest of these birds was discovered, containing between two and three hundred eggs.

[To be continued.]

XLV.—*Anatomical Researches on the Nervous and Circulating Systems of the Triton aquaticus, or Aquatic Salamander.* By G. NICOLUCCI of Naples. Communicated by Dr. Grant, Professor of Comparative Anatomy and Zoology in University College, London.

THE object of the brief investigations which we now detail is merely a summary indication of the nervous and circulating systems of the Aquatic Salamander, in preparing a complete monograph of which we have been for some time engaged.

1. *Nervous System.*

The encephalic mass of the Salamander occupies a great part of the cavity of the cranium, and is formed by two oblong hemispheres, having a median furrow on their upper and under surface. The pineal gland, sufficiently developed, fills the space that the hemispheres present on the under side by diverging a little from each other, and closes the large calamus scriptorius between the two enlargements of the medulla oblongata, which, extended as far as the tail, presents a longitudinal median furrow. It is around the brain itself, and most especially externally along the furrow that separates the lobes of the medulla oblongata, that the chalky follicles of